

PDZK7 (S-14): sc-138514

BACKGROUND

PDZK7, also known as PDZD7 (PDZ domain containing 7), is a 517 amino acid protein that contains two PDZ (DHR) domains. Encoded by a gene that maps to human chromosome 10q24.31, PDZK7 is conserved in canine, mouse and rat, and exists as three alternatively spliced isoforms. PDZK7 is known to interact with Harmonin, MASS1, USH1G and Usherin. Localizing to nucleus, PDZK7 is expressed in retinal pigment epithelium and inner ear. Biallelic inactivation of PDZK7 can cause non-syndromic hearing impairment and chromosomal aberrations, which are linked to non-syndromic sensorineural deafness. PDZK7 mutations are also linked to Usher syndrome, which is characterized by retinitis pigmentosa and sensorineural deafness, and Alzheimer disease. The gene that encodes PDZK7 maps to human chromosome 10q24.31.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: PDZD7 (human) mapping to 10q24.31; Pdzd7 (mouse) mapping to 19 C3.

SOURCE

PDZK7 (S-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of PDZK7 of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-138514 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

PDZK7 (S-14) is recommended for detection of PDZK7 isoforms 1 and 2 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); non cross-reactive with other PDZK family members.

PDZK7 (S-14) is also recommended for detection of PDZK7 isoforms 1 and 2 in additional species, including canine, bovine and porcine.

Suitable for use as control antibody for PDZK7 siRNA (h): sc-90504, PDZK7 siRNA (m): sc-152149, PDZK7 shRNA Plasmid (h): sc-90504-SH, PDZK7 shRNA Plasmid (m): sc-152149-SH, PDZK7 shRNA (h) Lentiviral Particles: sc-90504-V and PDZK7 shRNA (m) Lentiviral Particles: sc-152149-V.

Molecular Weight of PDZK7 isoforms 1/2/3: 56/55/112 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

RESEARCH USE

For research use only, not for use in diagnostic procedures.